

NPDES Permit No. IL0029343

Notice No. SKT:13060603.bah

Public Notice Beginning Date: **March 20, 2014**

Public Notice Ending Date: **April 21, 2014**

National Pollutant Discharge Elimination System (NPDES)
Permit Program

PUBLIC NOTICE/FACT SHEET
of
Draft Reissued NPDES Permit to Discharge into Waters of the State

Public Notice/Fact Sheet Issued By:

Illinois EPA
Division of Water Pollution Control
Permit Section
1021 North Grand Avenue East
Post Office Box 19276
Springfield, Illinois 62794-9276
217/782-0610

Name and Address of Permittee:

City of Kewanee
401 East Third Street
Kewanee, Illinois 61443

Name and Address of Facility:

Kewanee Sewage Treatment Plant
194 Fisher Avenue
Kewanee, Illinois
(Henry County)

The Illinois Environmental Protection Agency (IEPA) has made a tentative determination to issue a NPDES Permit to discharge into the waters of the state and has prepared a draft Permit and associated fact sheet for the above named Permittee. The Public Notice period will begin and end on the dates indicated in the heading of this Public Notice/Fact Sheet. All comments on the draft Permit and requests for hearing must be received by the IEPA by U.S. Mail, carrier mail or hand delivered by the Public Notice Ending Date. Interested persons are invited to submit written comments on the draft Permit to the IEPA at the above address. Commentors shall provide his or her name and address and the nature of the issues proposed to be raised and the evidence proposed to be presented with regards to those issues. Commentors may include a request for public hearing. Persons submitting comments and/or requests for public hearing shall also send a copy of such comments or requests to the Permit applicant. The NPDES Permit and notice numbers must appear on each comment page.

The application, engineer's review notes including load limit calculations, Public Notice/Fact Sheet, draft Permit, comments received, and other documents are available for inspection and may be copied at the IEPA between 9:30 a.m. and 3:30 p.m. Monday through Friday when scheduled by the interested person.

If written comments or requests indicate a significant degree of public interest in the draft Permit, the permitting authority may, at its discretion, hold a public hearing. Public notice will be given 45 days before any public hearing. Response to comments will be provided when the final Permit is issued. For further information, please call Surinder Tandon at 217/782-0610.

The following water quality and effluent standards and limitations were applied to the discharge:

Title 35: Environmental Protection, Subtitle C: Water Pollution, Chapter I: Pollution Control Board and the Clean Water Act were applied in determining the applicable standards, limitations and conditions contained in the draft Permit.

The applicant is engaged in treating domestic wastewater for the City of Kewanee.

The length of the Permit is approximately 5 years.

The main discharge number is 001. The seven day once in ten year low flow (7Q10) of the receiving stream, West Fork Spoon River is 0 cfs.

The design average flow (DAF) for the facility is 2 million gallons per day (MGD) and the design maximum flow (DMF) for the facility is 5 MGD. Treatment consists of screening, grit removal, flow equalization, oxidation ditch, secondary clarification, tertiary filters. Sludge treatment consists of aerobic digester, gravity sludge thickener, vacuum dry beds, sludge storage lagoon, land application.

This Reissued Permit does not increase the facility's DAF, DMF, concentration limits, and/or load limits.

This Permit recognizes and continues the year-round disinfection exemption approved by the IEPA on June 4, 1990 and revalidated on December 6, 2012. It is the IEPA's tentative decision that under Illinois Pollution Control Board regulations, the following reach of waterbody is not classified for primary contact use activities and is not subject to the fecal coliform water quality standard of 35 Ill. Adm. Code 302.209.

This draft permit does not contain requirements for disinfection of the discharge from discharge numbers(s) 001. The West Fork Spoon River from the point of effluent discharge, to the confluence with the East Fork Spoon River, has been determined to be unsuited to support primary contact activities (swimming) due to physical, hydrologic or geographic configuration. Anyone knowing of primary contact activities occurring within this water segment is invited to submit comments to the IEPA. Comments should give the nature of the activities (i.e swimming, fishing, canoeing, etc.), the location and months of the year when these activities have been observed. The IEPA is also interested in obtaining information on the proximity of residential dwellings and the accessibility of the public to this water segment. Anyone with such information is asked to submit comments to the IEPA on this draft permit action. Instructions for submitting comments are contained earlier in this document.

Application is made for the existing discharge(s) which are located in Henry County, Illinois. The following information identifies the discharge point, receiving stream and stream classifications:

| Discharge Number | Receiving Stream | Latitude | Longitude | Stream Classification | Integrity Rating |
|------------------|-----------------------|-------------------|------------------|-----------------------|------------------|
| 001 | West Fork Spoon River | 41° 14' 35" North | 89° 54' 01" West | General Use | Not Rated |
| 003 | West Fork Spoon River | 41° 14' 34" North | 89° 54' 07" West | General Use | Not Rated |
| 004 | West Fork Spoon River | 41° 14' 32" North | 89° 54' 01" West | General Use | Not Rated |
| 005 | West Fork Spoon River | 41° 14' 24" North | 89° 54' 09" West | General Use | Not Rated |

To assist you further in identifying the location of the discharge(s) please see the attached map.

The West Fork Spoon River, waterbody segment DJO-01, is listed on the draft 2012 Illinois Integrated Water Quality Report and Section 303 (d) List as impaired.

The following parameters have been identified as the pollutants causing impairment:

| Potential Causes | Uses Impaired |
|--------------------------------------|------------------|
| Chloride and sedimentation/siltation | Aquatic life use |

From the discharge, the West Fork Spoon River flows for approximately 19.3 miles and joins the Spoon River, waterbody segment DJ-06. This segment is 25.3 miles in length. Spoon River, waterbody segment DJ-02 is the next downstream segment and is 24.2 miles in length. Spoon River, waterbody segment DJ-09 is the next downstream segment and is 37.8 miles in length. Spoon River, waterbody segment DJ-08 is the next downstream segment and is 30.4 miles in length. The Spoon River, waterbody segment DJ-01 is the next downstream segment and is 28.6 miles in length.

Waterbody segments DJ-02, DJ-06, DJ08 and DJ09 are listed on the draft 2012 Illinois Integrated Water Quality Report and Section 303 (d) List as impaired.

The following parameters have been identified as the pollutants causing impairment: for Segments DJ-02, DJ-06 and DJ-08:

| Potential Causes | Uses Impaired |
|-------------------------|-----------------|
| Fecal coliform bacteria | Primary contact |

The following parameters have been identified as the pollutants causing impairment for Segment DJ-09:

| Potential Causes | Uses Impaired |
|-------------------------|------------------|
| Fecal coliform bacteria | Primary contact |
| Mercury | Fish consumption |

Waterbody segment, DJ-01 is not listed on the draft 2012 Illinois Integrated Water Quality Report and Section 303 (d) List as impaired.

The discharge(s) from the facility is (are) proposed to be monitored and limited at all times as follows:

Discharge Number(s) and Name(s): 001 STP Outfall

Load limits computed based on a design average flow (DAF) of 2 MGD (design maximum flow (DMF) of 5 MGD).

The effluent of the above discharge(s) shall be monitored and limited at all times as follows:

| Parameter | LOAD LIMITS lbs/day DAF (DMF)* | | | CONCENTRATION LIMITS mg/L | | | Regulation |
|--------------------------------|--|-------------------|------------------|----------------------------------|---------------------------------|------------------|----------------------------------|
| | Monthly Average | Weekly Average | Daily Maximum | Monthly Average | Weekly Average | Daily Maximum | |
| CBOD ₅ | 167 (417) | | 384 (834) | 10 | | 20 | 35 IAC 304.120 40 CFR 133.102 |
| Suspended Solids | 200 (500) | | 400 (1001) | 12 | | 24 | 35 IAC 304.120 40 CFR 133.102 |
| pH | Shall be in the range of 6 to 9 Standard Units | | | | | | 35 IAC 304.125 |
| Fecal Coliform | Monitor Only (May through October) | | | | | | 35 IAC 309.146 |
| Chlorine Residual | | | | | | 0.05 | 35 IAC 302.208 |
| Ammonia Nitrogen: March | 23 (58) | 58 (146) | 73 (183) | 1.4 | 3.5 | 4.4 | 35 IAC 355 and 35 IAC 302 |
| April-May/Sept.-Oct. | 22 (54) | 58 (146) | 73 (183) | 1.3 | 3.5 | 4.4 | |
| June-August | 15 (38) | 38 (96) | 100 (250) | 0.9 | 2.3 | 6.0 | |
| Nov.-Feb. | 48 (121) | | 78 (196) | 2.9 | | 4.7 | |
| Phosphorus (as P) | Monitor Only | | | | | | 35 IAC 309.146 |
| Total Nitrogen | Monitor Only | | | | | | 35 IAC 309.146 |
| Chloride | Monitor Only | | | | | | 35 IAC 309.146 |
| | | | | Monthly Avg. not less than | Weekly Avg. not less than | Daily Minimum | |
| Dissolved Oxygen March-July | | | | N/A | 6.0 | 5.0 | 35 IAC 302.206 |
| August-February | | | | 5.5 | 4.0 | 3.5 | |

*Load Limits are calculated by using the formula: $8.34 \times (\text{Design Average and/or Maximum Flow in MGD}) \times (\text{Applicable Concentration in mg/L})$.

This Permit contains an authorization to treat and discharge excess flow as follows:

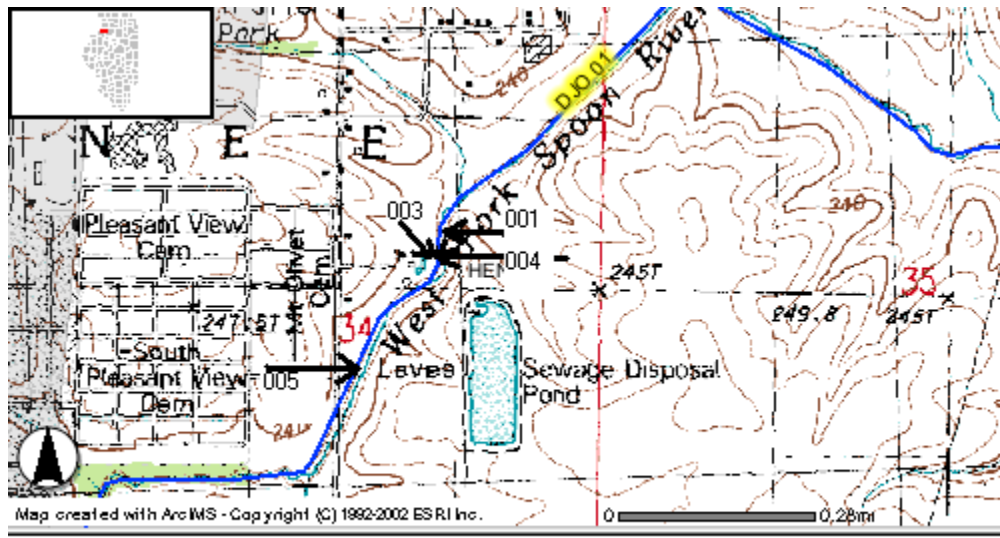
Discharge Number(s) and Name(s): 004 and 005 Excess Flow Lagoon Outfalls

| Parameter | CONCENTRATION LIMITS (mg/L) | | Regulation |
|--------------------|--|----------------|----------------|
| | Monthly Average | Weekly Average | |
| BOD ₅ * | 30 | 45 | 40 CFR 133.102 |
| Suspended Solids* | 30 | 45 | 40 CFR 133.102 |
| Fecal Coliform | Daily Maximum Shall Not Exceed 400 per 100 mL | | 35 IAC 304.121 |
| pH | Shall be in the range of 6 to 9 Standard Units | | 35 IAC 304.125 |
| Chlorine Residual | 0.75 | | 35 IAC 304.208 |

*The 30-day average percent removal shall not be less than 85 percent.

This draft Permit also contains the following requirements as special conditions:

1. Reopening of this Permit to include different final effluent limitations.
2. Operation of the facility by or under the supervision of a certified operator.
3. Submission of the operational data in a specified form and at a required frequency at any time during the effective term of this Permit.
4. More frequent monitoring requirement without Public Notice in the event of operational, maintenance or other problems resulting in possible effluent deterioration.
5. Prohibition against causing or contributing to violations of water quality standards.
6. Recording the monitoring results on Discharge Monitoring Report Forms using one such form for each outfall each month and submitting the forms to IEPA each month.
7. The provisions of 40 CFR Section 122.41(m) & (n) are incorporated herein by reference.
8. Effluent sampling point location.
9. Controlling the sources of infiltration and inflow into the sewer system.
10. A requirement to monitor and a limit of 0.05 mg/L for residual chlorine when it is used.
11. Monitoring for arsenic, barium, cadmium, hexavalent chromium, total chromium, copper, weak acid dissociable cyanide, total cyanide, fluoride, dissolved iron, total iron, lead, manganese, mercury, nickel, oil, phenols, selenium, silver and zinc is required to be conducted semi-annually beginning 3 months from the effective date.
12. Burden reduction.
13. Submission of annual fiscal data.
14. A requirement for biomonitoring of the effluent.
15. Conditional authorization to discharge from high level emergency bypass(es) based on 40 CFR.
16. Submission of semi annual reports indicating the quantities of sludge generated and disposed.
17. Capacity, Management, Operations and Maintenance (CMOM) requirements.
18. Compliance Schedule for Chloride.
19. At minimum of 85% removal of CBOD5 and suspended solids.



NPDES Permit No. IL0029343

Illinois Environmental Protection Agency

Division of Water Pollution Control

1021 North Grand Avenue East

Post Office Box 19276

Springfield, Illinois 62794-9276

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

Reissued (NPDES) Permit

Expiration Date:

Issue Date:

Effective Date:

Name and Address of Permittee:

City of Kewanee
401 East Third Street
Kewanee, Illinois 61443

Facility Name and Address:

Kewanee Sewage Treatment Plant
194 Fisher Avenue
Kewanee, Illinois
(Henry County)

Receiving Waters: West Fork Spoon River

In compliance with the provisions of the Illinois Environmental Protection Act, Title 35 of the Ill. Adm. Code, Subtitle C, Chapter I, and the Clean Water Act (CWA), the above-named Permittee is hereby authorized to discharge at the above location to the above-named receiving stream in accordance with the standard conditions and attachments herein.

Permittee is not authorized to discharge after the above expiration date. In order to receive authorization to discharge beyond the expiration date, the Permittee shall submit the proper application as required by the Illinois Environmental Protection Agency (IEPA) not later than 180 days prior to the expiration date.

Alan Keller, P.E.
Manager, Permit Section
Division of Water Pollution Control

SAK:SKT:13060603.bah

Effluent Limitations, Monitoring, and Reporting

FINAL

Discharge Number(s) and Name(s): 001 STP Outfall

Load limits computed based on a design average flow (DAF) of 2 MGD (design maximum flow (DMF) of 5 MGD).

From the effective date of this Permit until the expiration date, the effluent of the above discharge(s) shall be monitored and limited at all times as follows:

| Parameter | LOAD LIMITS lbs/day DAF (DMF)* | | | CONCENTRATION LIMITS mg/L | | | Sample Frequency | Sample Type |
|--------------------------------|--|-------------------|------------------|--|---------------------------------------|------------------|---------------------|----------------|
| | Monthly Average | Weekly Average | Daily Maximum | Monthly Average | Weekly Average | Daily Maximum | | |
| Flow (MGD) | | | | | | | Continuous | |
| CBOD ₅ ** | 167 (417) | | 384 (834) | 10 | | 20 | 1 Day/Week | Composite |
| Suspended Solids | 200 (500) | | 400 (1001) | 12 | | 24 | 1 Day/Week | Composite |
| pH | Shall be in the range of 6 to 9 Standard Units | | | | | | 1 Day/Week | Grab |
| Fecal Coliform*** | Monitor Only (May through October) | | | | | | 1 Day/Month | Grab |
| Chlorine Residual | | | | | | 0.05 | **** | Grab |
| Ammonia Nitrogen: As (N) | | | | | | | | |
| March | 23 (58) | 58 (146) | 73 (183) | 1.3 | 3.5 | 4.4 | 1 Day/Week | Composite |
| April-May/Sept.-Oct. | 22 (54) | 58 (146) | 73 (183) | 1.3 | 3.5 | 4.4 | 1 Day/Week | Composite |
| June-August | 15 (38) | 38 (96) | 100 (250) | 0.9 | 2.3 | 6.0 | 1 Day/Week | Composite |
| Nov.-Feb. | 48 (121) | | 78 (196) | 2.9 | | 4.7 | 1 Day/Week | Composite |
| Phosphorus (as P) | Monitor Only | | | | | | 1 Day/Month | Compsite |
| Total Nitrogen | Monitor Only | | | | | | 1 Day/Month | Composite |
| Chloride***** | Monitor Only | | | | | | 1 Day/Week | Composite |
| | | | | Monthly Average not less than | Weekly Average not less than | Daily Minimum | | |
| Dissolved Oxygen March-July | | | | N/A | 6.0 | 5.0 | 1 Day/Week | Grab |
| August-February | | | | 5.5 | 4.0 | 3.5 | 1 Day/Week | Grab |

*Load limits based on design maximum flow shall apply only when flow exceeds design average flow.

**Carbonaceous BOD₅ (CBOD₅) testing shall be in accordance with 40 CFR 136.

***Fecal Coliform shall be monitored from May thru Octover with sample results reported as a daily maximum value on the DMR.

****See Special Condition 10.

*****See Special Condition 18.

Flow shall be reported on the Discharge Monitoring Report (DMR) as monthly average and daily maximum.

pH shall be reported on the DMR as minimum and maximum value.

Dissolved oxygen shall be reported on the DMR as a minimum value.

NPDES Permit No. IL0029343

Effluent Limitations, Monitoring, and Reporting

FINAL

Discharge Number(s) and Name(s): 004, 005 Excess Flow Lagoon Outfalls

These facilities shall not be utilized until the main treatment facility is receiving its maximum practical flow* (flow in excess of 5 MGD)

Excess Flow Lagoon Outfall 004 is the discharge from the East Lagoon (25 MG capacity) to the West Fork Spoon River.

Excess Flow Lagoon Outfall 005 is the discharge from the West Lagoon (16 MG capacity) to the West Fork Spoon River.

From the effective date of this Permit until the expiration date, the effluent of the above discharge(s) shall be monitored and limited at all times as follows:

| Parameter | | CONCENTRATION LIMITS mg/L | | Sample Frequency | Sample Type |
|---------------------|--|------------------------------|-------------------|------------------------|-------------|
| | | Monthly Average | Weekly Average | | |
| Total Flow (MG) | See Below | | | Daily When Discharging | Continuous |
| BOD ₅ ** | | 30 | 45 | Daily When Discharging | Grab |
| Suspended Solids** | | 30 | 45 | Daily When Discharging | Grab |
| Fecal Coliform | Daily Maximum Shall Not Exceed 400 per 100 mL | | | Daily When Discharging | Grab |
| pH | Shall be in the range of 6 to 9 Standard Units | | | Daily When Discharging | Grab |
| Chlorine Residual | | 0.75 | | Daily When Discharging | Grab |

Total flow in million gallons shall be reported on the Discharge Monitoring Report (DMR) in the quantity maximum column.

Report the number of days of discharge in the comments section of the DMR.

Fecal Coliform shall be reported on the DMR as daily maximum.

Chlorine Residual shall be reported on the DMR as a monthly average concentration.

pH shall be reported on the DMR as a minimum and a maximum.

BOD₅ and Suspended Solids shall be reported on the DMR as a monthly average concentration.

The permittee is authorized to discharge from outfalls 004 and 005 provided the following conditions are met:

1. The maximum flow possible, but at least ten times DAF ($10 \times 2.0 = 20.0$ MGD) and First Flush shall be captured and returned to process for complete treatment.
2. Permittee must provide optimum operation and maintenance at the lagoons and return them (drain) to their lowest operating depth in between storm events.

*An explanation shall be provided in the comment section of the DMR should these facilities be used when the main treatment facility is not receiving Design Maximum Flow (DMF). The explanation shall identify the reasons the main facility is at a diminished treatment capacity. Additionally, the Permittee shall comply with the provisions of Special Condition 7.

**The 30-day average percentage removal shall not be less than 85 percent.

NPDES Permit No. IL0029343

Influent Monitoring, and Reporting

The influent to the plant shall be monitored as follows:

| <u>Parameter</u> | <u>Sample Frequency</u> | <u>Sample Type</u> |
|------------------|-------------------------|--------------------|
| Flow (MGD) | Continuous | |
| BOD ₅ | 1 Day/Week | Composite |
| Suspended Solids | 1 Day/Week | Composite |

Influent samples shall be taken at a point representative of the influent.

Flow (MGD) shall be reported on the Discharge Monitoring Report (DMR) as monthly average and daily maximum.

BOD₅ and Suspended Solids shall be reported on the DMR as a monthly average concentration.

Special Conditions

SPECIAL CONDITION 1. This Permit may be modified to include different final effluent limitations or requirements which are consistent with applicable laws, regulations, or judicial orders. The IEPA will public notice the permit modification.

SPECIAL CONDITION 2. The use or operation of this facility shall be by or under the supervision of a Certified Class 1 operator.

SPECIAL CONDITION 3. The IEPA may request in writing submittal of operational information in a specified form and at a required frequency at any time during the effective period of this Permit.

SPECIAL CONDITION 4. The IEPA may request more frequent monitoring by permit modification pursuant to 40 CFR § 122.63 and Without Public Notice in the event of operational, maintenance or other problems resulting in possible effluent deterioration.

SPECIAL CONDITION 5. The effluent, alone or in combination with other sources, shall not cause a violation of any applicable water quality standard outlined in 35 Ill. Adm. Code 302.

SPECIAL CONDITION 6. The Permittee shall record monitoring results on Discharge Monitoring Report (DMR) Forms using one such form for each outfall each month.

In the event that an outfall does not discharge during a monthly reporting period, the DMR Form shall be submitted with no discharge indicated.

The Permittee may choose to submit electronic DMRs (NetDMRs) instead of mailing paper DMRs to the IEPA. More information, including registration information for the NetDMR program, can be obtained on the IEPA website, <http://www.epa.state.il.us/water/net-dmr/index.html>.

The completed Discharge Monitoring Report forms shall be submitted to IEPA no later than the 25th day of the following month, unless otherwise specified by the permitting authority.

Permittees not using NetDMRs shall mail Discharge Monitoring Reports with an original signature to the IEPA at the following address:

Illinois Environmental Protection Agency
 Division of Water Pollution Control
 Attention: Compliance Assurance Section, Mail Code # 19
 1021 North Grand Avenue East
 Post Office Box 19276
 Springfield, Illinois 62794-9276

SPECIAL CONDITION 7. The provisions of 40 CFR Section 122.41(m) & (n) are incorporated herein by reference.

SPECIAL CONDITION 8. Samples taken in compliance with the effluent monitoring requirements shall be taken at a point representative of the discharge, but prior to entry into the receiving stream.

SPECIAL CONDITION 9. This Permit may be modified to include requirements for the Permittee on a continuing basis to evaluate and detail its efforts to effectively control sources of infiltration and inflow into the sewer system and to submit reports to the IEPA if necessary.

SPECIAL CONDITION 10. For Discharge No. 001, any use of chlorine to control slime growths, odors or as an operational control, etc. shall not exceed the limit of 0.05 mg/L (daily maximum) total residual chlorine in the effluent. Sampling is required on a daily grab basis during the chlorination process. Reporting shall be submitted on the DMR's on a monthly basis.

SPECIAL CONDITION 11. The Permittee shall conduct semi-annual monitoring of the effluent and report concentrations (in mg/l) of the following listed parameters. Monitoring shall begin three (3) months from the effective date of this permit. The sample shall be a 24-hour effluent composite except as otherwise specifically provided below and the results shall be submitted on Discharge Monitoring Report Forms to IEPA unless otherwise specified by the IEPA. The parameters to be sampled and the minimum reporting limits to be attained are as follows:

| <u>STORET</u> <u>CODE</u> | <u>PARAMETER</u> | <u>Minimum</u> <u>reporting limit</u> |
|------------------------------|------------------------------|--|
| 01002 | Arsenic | 0.05 mg/L |
| 01007 | Barium | 0.5 mg/L |
| 01027 | Cadmium | 0.001 mg/L |
| 01032 | Chromium (hexavalent) (grab) | 0.01 mg/L |
| 01034 | Chromium (total) | 0.05 mg/L |
| 01042 | Copper | 0.005 mg/L |
| STORET | | Minimum |

Special Conditions

| <u>CODE</u> | <u>PARAMETER</u> | <u>reporting limit</u> |
|-------------|--|------------------------|
| 00718 | Cyanide (available *** or amenable to chlorination) (grab) | 5.0 ug/L |
| 00720 | Cyanide (total) (grab not to exceed 24 hours) | 5.0 ug/L |
| 00951 | Fluoride | 0.1 mg/L |
| 01045 | Iron (total) | 0.5 mg/L |
| 01046 | Iron (Dissolved) | 0.5 mg/L |
| 01051 | Lead | 0.05 mg/L |
| 01055 | Manganese | 0.5 mg/L |
| 71900 | Mercury (grab)** | 1.0 ng/L* |
| 01067 | Nickel | 0.005 mg/L |
| 00556 | Oil (hexane soluble or equivalent) (Grab Sample only) | 5.0 mg/L |
| 32730 | Phenols (grab) | 0.005 mg/L |
| 01147 | Selenium | 0.005 mg/L |
| 01077 | Silver (total) | 0.003 mg/L |
| 01092 | Zinc | 0.025 mg/L |

Unless otherwise indicated, concentrations refer to the total amount of the constituent present in all phases, whether solid, suspended or dissolved, elemental or combined, including all oxidation states.

*1.0 ng/L = 1 part per trillion.

**Utilize USEPA Method 1631E and the digestion procedure described in Section 11.1.1.2 of 1631E.

*** USEPA Method OIA-1677

SPECIAL CONDITION 12. The Permittee has undergone a Monitoring Reduction review and the influent and effluent sample frequency has been reduced for BOD₅, CBOD₅, Suspended Solids, pH, and Ammonia due to sustained compliance. The IEPA will require that the influent and effluent sampling frequency for these parameters be increased to 3 days/week if effluent deterioration occurs due to increased wasteload, operational, maintenance or other problems. The increased monitoring will be required Without Public Notice when a permit modification is received by the Permittee from the IEPA.

SPECIAL CONDITION 13. During January of each year the Permittee shall submit annual fiscal data regarding sewerage system operations to the Illinois Environmental Protection Agency/Division of Water Pollution Control/Compliance Assurance Section. The Permittee may use any fiscal year period provided the period ends within twelve (12) months of the submission date.

Submission shall be on forms provided by IEPA titled "Fiscal Report Form For NPDES Permittees".

SPECIAL CONDITION 14. The Permittee shall conduct biomonitoring of the effluent from Discharge Number(s) 001.

Biomonitoring

1. Acute Toxicity - Standard definitive acute toxicity tests shall be run on at least two trophic levels of aquatic species (fish, invertebrate) representative of the aquatic community of the receiving stream. Testing must be consistent with Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms (Fifth Ed.) EPA/821-R-02-012. Unless substitute tests are pre-approved; the following tests are required:
 - a. Fish - 96 hour static LC₅₀ Bioassay using fathead minnows (*Pimephales promelas*).
 - b. Invertebrate 48-hour static LC₅₀ Bioassay using *Ceriodaphnia*.
2. Testing Frequency - The above tests shall be conducted using 24-hour composite samples unless otherwise authorized by the IEPA. Samples must be collected in the 18th, 15th, 12th, and 9th month prior to the expiration date of this Permit.
3. Reporting - Results shall be reported according to EPA/821-R-02-012, Section 12, Report Preparation, and shall be submitted to IEPA, Bureau of Water, Compliance Assurance Section within one week of receipt from the laboratory. Reports are due to the IEPA no later than the 16th, 13th, 10th, and 7th month prior to the expiration date of this Permit.
4. Toxicity - Should a bioassay result in toxicity to >20% of organisms test in the 100% effluent treatment, the IEPA may require, upon notification, six (6) additional rounds of monthly testing on the affected organism(s) to be initiated within 30 days of the toxic bioassay. Results shall be submitted to IEPA within (1) week of becoming available to the Permittee. Should any of the additional bioassays result in toxicity to ≥50% of organisms tested in the 100% effluent treatments, the Permittee may wish to contact the IEPA to request the discontinuance of further sampling at which time the IEPA may require the Permittee to begin the toxicity reduction evaluation and identification as outlined below.

Special Conditions

5. Toxicity Reduction Evaluation - Should the results of the biomonitoring program identify toxicity, the IEPA may require that the Permittee prepare a plan for toxicity reduction evaluation and identification. This plan shall be developed in accordance with Toxicity Reduction Evaluation Guidance for Municipal Wastewater Treatment Plants, EPA/833B-99/002, and shall include an evaluation to determine which chemicals have a potential for being discharged in the plant wastewater, a monitoring program to determine their presence or absence and to identify other compounds which are not being removed by treatment, and other measures as appropriate. The Permittee shall submit to the IEPA its plan for toxicity reduction evaluation within ninety (90) days following notification by the IEPA. The Permittee shall implement the plan within ninety (90) days or other such date as contained in a notification letter received from the IEPA.

The IEPA may modify this Permit during its term to incorporate additional requirements or limitations based on the results of the biomonitoring. In addition, after review of the monitoring results, the IEPA may modify this Permit to include numerical limitations for specific toxic pollutants. Modifications under this condition shall follow public notice and opportunity for hearing.

SPECIAL CONDITION 15. Discharge Number 003 is an emergency high level outfall. Discharges from this outfall are prohibited. These prohibited discharges, if they occur, are subject to conditions 1-5 listed below.

(1) Definitions

"Severe property damage" means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a discharge. Severe property damage does not mean economic loss caused by delays in production.

(2) Notice

(i) Anticipated discharge. If the Permittee knows in advance of the need for a prohibited discharge from Discharge Number 003, it shall submit prior notice, if possible at least ten days before the date of the discharge.

(ii) Unanticipated discharge. The Permittee shall submit notice of an unanticipated discharge as required in Standard Condition 12(f) of this Permit (24-hour notice).

(3) Limitation on IEPA enforcement discretion. The IEPA may take enforcement action against a Permittee for prohibited discharges from Discharge Number 003, unless:

(i) Discharge was unavoidable to prevent loss of life, personal injury, or severe property damage;

(ii) There was no feasible alternative to the discharge, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a discharge which occurred during normal periods of equipment downtime or preventive maintenance; and

(iii) The Permittee submitted notices as required under Standard Condition 12(f) of this Permit.

(4) Emergency discharges when discharging, shall be monitored daily by grab sample for BOD₅, Suspended Solids and Fecal Coliform. The Permittee shall submit the monitoring results on Discharge Monitoring Report forms using one such form for each month in which discharging occurs. The Permittee shall specify the number of discharges per month that occur and shall report this number in the quantity daily maximum column. The Permittee shall report the highest concentration value of BOD₅, Suspended Solids and Fecal Coliform discharged in the concentration daily maximum column.

(5) The above limitations on enforcement discretion apply only with respect to IEPA. They do not serve as a limitation on the ability of any other governmental agency or person to bring an enforcement action in accordance with the Federal Clean Water Act.

SPECIAL CONDITION 16. For the duration of this Permit, the Permittee shall determine the quantity of sludge produced by the treatment facility in dry tons or gallons with average percent total solids analysis. The Permittee shall maintain adequate records of the quantities of sludge produced and have said records available for IEPA inspection. The Permittee shall submit to the IEPA, at a minimum, a semi-annual summary report of the quantities of sludge generated and disposed of, in units of dry tons or gallons (average total percent solids) by different disposal methods including but not limited to application on farmland, application on reclamation land, landfilling, public distribution, dedicated land disposal, sod farms, storage lagoons or any other specified disposal method. Said reports shall be submitted to the IEPA by January 31 and July 31 of each year reporting the preceding January thru June and July thru December interval of sludge disposal operations.

Duty to Mitigate. The Permittee shall take all reasonable steps to minimize any sludge use or disposal in violation of this Permit.

Sludge monitoring must be conducted according to test procedures approved under 40 CFR 136 unless otherwise specified in 40 CFR 503, unless other test procedures have been specified in this Permit.

Special Conditions

Planned Changes. The Permittee shall give notice to the IEPA on the semi-annual report of any changes in sludge use and disposal.

The Permittee shall retain records of all sludge monitoring, and reports required by the Sludge Permit as referenced in Standard Condition 25 for a period of at least five (5) years from the date of this Permit.

If the Permittee monitors any pollutant more frequently than required by the Sludge Permit, the results of this monitoring shall be included in the reporting of data submitted to the IEPA.

Monitoring reports for sludge shall be reported on the form titled "Sludge Management Reports" to the following address:

Illinois Environmental Protection Agency
Bureau of Water
Compliance Assurance Section
Mail Code #19
1021 North Grand Avenue East
Post Office Box 19276
Springfield, Illinois 62794-9276

SPECIAL CONDITION 17. The Permittee shall work towards the goals of achieving no discharges from sanitary sewer overflows or basement backups and ensuring that overflows or backups, when they do occur do not cause or contribute to violations of applicable standards or cause impairment in any adjacent receiving water. In order to accomplish these goals, the Permittee shall develop, implement and submit to the IEPA a Capacity, Management, Operations, and Maintenance (CMOM) plan within twelve (12) months of the effective date of this Permit. The Permittee should work as appropriate, in consultation with affected authorities at the local, county, and/or state level to develop the plan components involving third party notification of overflow events. The Permittee may be required to construct additional sewage transport and/or treatment facilities in future permits or other enforceable documents should the implemented CMOM plan indicate that the Permittee's facilities are not capable of conveying and treating the flow for which they were designed.

The CMOM plan shall include the following elements:

a. Measures and Activities:

1. A complete map of the collection system owned and operated by the Permittee;
2. Schedules, checklists, and mechanisms to ensure that preventative maintenance is performed on equipment owned and operated by the Permittee;
3. An assessment of the capacity of the collection and treatment system owned and operated by the Permittee at critical junctions and immediately upstream of locations where overflows and backups occur or are likely to occur; and
4. Identification and prioritization of structural deficiencies in the system owned and operated by the Permittee.

b. Design and Performance Provisions:

1. Monitor the effectiveness of CMOM;
2. Upgrade the elements of the CMOM plan as necessary; and
3. Maintain summary of CMOM activities.

c. Overflow Response Plan:

1. Know where overflows within the facilities owned and operated by the Permittee occur;
2. Respond to each overflow to determine additional actions such as clean up.
3. Locations where basement back-ups and/or sanitary sewer overflows occur shall be evaluated as soon as practicable for excessive inflow /infiltration, obstructions or other causes of overflows or back-ups as set forth in the System Evaluation Plan.

d. System Evaluation Plan.

e. Reporting and Monitoring Requirements.

f. Third Party Notice Plan:

1. Describes how, under various overflow scenarios, the public, as well as other entities, would be notified of overflows within the Permittee's system that may endanger public health, safety or welfare;
2. Identifies overflows within the Permittee's system that would be reported, giving consideration to various types of events including events with potential widespread impacts;
3. Identifies who shall receive the notification;
4. Identifies the specific information that would be reported including actions that will be taken to respond to the overflow;

Special Conditions

5. Includes a description of the lines of communication; and
6. Includes the identities and contact information of responsible POTW officials and local, county, and/or state level officials.

SPECIAL CONDITION 18.

Project Description: Compliance with Chloride Water Quality Standards.

The following limits shall become effective in accordance with the schedule provided below:

| | Load Limits lbs/day <u>DAF (DMF)*</u> | Concentration <u>Limits mg/L</u> |
|-----------|--|-------------------------------------|
| Parameter | Daily Max | Daily Max |
| Chloride | 8340 (20850) | 500 |

*Load limits based on design maximum flow shall apply when flow exceeds the design average flow.

The Permittee shall achieve compliance with above WQS in accordance with the following schedule:

- 1) Report giving the source of chloride in the system and record of final effluent chloride results from 5 years ago to present 6 months from the effective date of NPDES Permit
- 2) Submit a report summarizing the chloride relief calls with USEPA and present the likely means (as tentatively determined) of justifying IPCB relief according to the guidance provided by USEPA during the calls. 12 months from the effective date of NPDES Permit
- 3) Submit a report giving the exact method of relief recommended by USEPA that will be made in a petition before the IPCB. 18 months from the effective date of NPDES Permit
- 4) Submit the date of filing for IPCB relief and a copy of petition filed 24 months from the effective date of NPDES Permit
- 5) Submit the interim progress report with IPCB 30 months from the effective date of NPDES Permit
- 6) Submit the relief granted by the IPCB and the permit limit for chloride 36 months from the effective date of NPDES Permit

This permit may be modified, with Public Notice, to include revised compliance dates set out in this Permit that are superseded or supplemented by compliance dates in judicial orders, Pollution Control Board orders or other legally binding agreements. Prior to such permit modification, the revised dates in the appropriate orders or agreements shall govern the Permittee's compliance.

SPECIAL CONDITION 19. Final Conditions - For Discharge No. 001, 004 and 005 BOD₅ and Suspended Solids (85% removal required): The arithmetic mean of the values for effluent samples collected in a period of one calendar month shall not exceed 15 percent of the arithmetic mean of the values for influent samples collected at approximately the same time during the same period, except during those periods when the influent is diluted because of high flows if the tributary sewer system is combined. The percent removal need not be reported to the IEPA on DMR's but influent and effluent data must be available, as required elsewhere in this Permit, for IEPA inspection and review. For measuring compliance with this requirement, 5 mg/L shall be added to the effluent CBOD₅ concentration to determine the effluent BOD₅ concentration.